

ABSTRACT

A method and apparatus for re-synchronizing a remote mirroring pair including first and second storage systems which are connected to each other via a path, the first storage system being connected to a host. A primary volume is provided to the first storage system and a remote secondary volume is provided to the second storage system. The remote secondary volume is a copied volume of the primary volume which is in synchronous mode with the remote secondary volume. A local secondary volume is provided in the first storage system and has stored therein journal logs of write I/O's from the host and old data including write data of previous write I/O's. Recovery of data on the primary volume based on the local secondary volume is conducted when necessary by applying the journal logs to the old data without suspending the synchronous mode between the primary and remote secondary volumes.